

### § 173.337

stainless steel valve and valve seat that will not deteriorate in contact with nitrogen dioxide. Each valve opening must be closed by a solid metal plug with tapered thread properly luted to prevent leakage. Transportation in DOT 3AL cylinders is authorized only by highway and rail.

(b) Each UN pressure receptacle must be cleaned in accordance with the requirements of ISO 11621 (IBR, see §171.7 of this subchapter). Each DOT specification cylinder must be cleaned according to the requirements of GSA Federal Specification RR-C-901D, paragraphs 3.3.1 and 3.3.2 (IBR, see §171.7 of this subchapter). Cleaning agents equivalent to those specified in RR-C-901D may be used; however, any cleaning agent must not be capable of reacting with oxygen. One cylinder selected at random from a group of 200 or fewer and cleaned at the same time must be tested for oil contamination in accordance with Specification RR-C-901D, paragraph 4.3.2 (IBR, see §171.7 of this subchapter) and meet the standard of cleanliness specified therein.

[71 FR 33885, June 12, 2006]

### § 173.337 Nitric oxide.

(a) Nitric oxide must be packaged in cylinders conforming to the requirements of §173.40 and as follows:

(1) *DOT specification cylinder.* In a DOT 3A1800, 3AA1800, 3E1800, or 3AL1800 cylinder. A DOT specification cylinder must be charged to a pressure of not more than 5,170 kPa (750 psi) at 21 °C (70 °F). Transportation of nitric oxide in a DOT 3AL is cylinder is authorized only by highway and rail.

(2) *UN cylinder.* In a UN cylinder with a minimum test pressure of 200 bar. The maximum working pressure of the cylinder must not exceed 50 bar. The pressure in the cylinder at 65 °C (149 °F) may not exceed the test pressure. The use of UN tubes and MEGCs is not authorized.

(3) *Valves.* Cylinders must be equipped with a stainless steel valve and valve seat that will not deteriorate in contact with nitric oxide. Cylinders or valves may not be equipped with pressure relief devices of any type.

(b) Each UN cylinder must be cleaned in accordance with the requirements of ISO 11621 (IBR, see §171.7 of this sub-

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chapter). Each DOT specification cylinder must be cleaned in compliance with the requirements of GSA Federal Specification RR-C-901D, paragraphs 3.3.1 and 3.3.2 (IBR, see §171.7 of this subchapter). Cleaning agents equivalent to those specified in Federal Specification RR-C-901D may be used; however, any cleaning agent must not be capable of reacting with oxygen. One cylinder selected at random from a group of 200 or fewer and cleaned at the same time must be tested for oil contamination in accordance with Federal Specification RR-C-901D paragraph 4.3.2 and meet the standard of cleanliness specified therein.

[71 FR 33885, June 12, 2006]

### § 173.338 Tungsten hexafluoride.

(a) Tungsten hexafluoride must be packaged in specification 3A, 3AA, 3BN, or 3E (§§173.36, 173.37, 173.39, 173.42 of this subchapter) cylinders. Cylinders must be equipped with a valve protection cap or be packed in a strong outer packaging meeting the provisions of §173.40. Outlets of any valves must be capped or plugged. As an alternative, the cylinder opening may be closed by the use of a metal plug. Specification 3E cylinders must be shipped in an overpack that meets the provisions of §173.40.

(b) In place of the volumetric expansion test, DOT 3BN cylinders used in exclusive service may be given a complete external visual inspection in conformance with part 180, subpart C, of this subchapter, at the time such periodic requalification becomes due. Cylinders that undergo a complete external visual inspection, in place of the volumetric expansion test, must be condemned if removed from tungsten hexafluoride service.

[ 74 FR 16143, Apr. 9, 2009, as amended at 75 FR 5395, Feb. 2, 2010]

### § 173.340 Tear gas devices.

(a) Packagings for tear gas devices must be approved prior to initial transportation by the Associate Administrator.

(b) Tear gas devices may not be assembled with, or packed in the same packaging with, mechanically- or manually-operated firing, igniting,